

IN THE CLAIMS:

Kindly cancel Claims 16-19, and rewrite Claims 14, 15, 26, and 27 as follows: The status of all claims is also set forth below.

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Cancelled)
14. (Currently Amended) An apparatus for analyzing a base sequence, comprising:
a first board having a front surface and a back surface;
a thin polymeric gel film formed on the front surface of the first board for allowing a
base sequence test sample to be stretched and immobilized on the thin film, ~~said thin polymeric~~
~~gel film having depressions and projections, said projections and depressions having a pitch~~

~~within a range of from 0.1 μ m to 10 μ m;~~

a heating means disposed in the first board for heating and vaporizing the thin polymeric gel film in a desired region; and

a second board having a front surface which is disposed opposite ~~to the~~ a front surface of the first board thin polymeric gel film[.], whereby a region of the thin polymeric gel film is heated and vaporized to shoot a fragment of the base sequence test sample from the first board to a front surface of the second board.

15. (Currently Amended) An apparatus for analyzing a base sequence, comprising:

a first board having a front and a back surface[;]] and being formed of a light transmitting material allowing transmission of a laser beam;

an ablation layer formed on ~~the~~ a front surface of the first board, said ablation layer being formed of a material capable of being vaporized by heating of the ablation layer;

a thin polymeric gel film formed adjacent the ablation layer for allowing a base sequence test sample to be stretched and immobilized on said thin film, ~~said thin polymeric gel film having depressions and projections, said projections and depressions having a pitch within a range of from 0.1 μ m to 10 μ m formed on an ablation layer containing a material capable of being vaporized by heating formed on the front surface of the first board;~~

a heating means for heating and vaporizing the ablation layer in a desired region; and

a second board having a front surface which is disposed opposite to the front surface of the first board[.]], whereby a region of the ablation layer is heated and vaporized to shoot a fragment of the base sequence test sample with a corresponding fragment of the thin polymeric

gel film from the first board to a front surface of the second board.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Previously Presented) The apparatus for analyzing a base sequence, according to claim 14, wherein the heating means is laser beam irradiation from the back surface of the first board.

21. (Previously Presented) The apparatus for analyzing a base sequence, according to claim 14, wherein the heating means is an electric heater pre-formed in the first board.

22. (Previously Presented) The apparatus for analyzing a base sequence, according to claim 15, wherein the material capable of being vaporized by heating, contained in the ablation layer, is a plastic.

23. (Previously Presented) The apparatus for analyzing a base sequence, according to claim 15, wherein the heating means is laser beam irradiation from the back surface of the first board, and the ablation layer further contains a beam-absorbable material, in addition to the material capable of being vaporized by heating.

24. (Previously Presented) The apparatus for analyzing a base sequence, according to claim 23, wherein the beam-absorbable material is carbon.

25. (Previously Presented) The apparatus for analyzing a base sequence, according to claim 23, wherein the beam-absorbable material is vapor-deposited between the material capable

of being vaporized by heating and the first board.

26. (Currently Amended) ~~The~~ An apparatus for analyzing a base sequence, ~~according to claim 15, wherein the material of the thin polymeric gel film is polymethyl methacrylate (PMMA) comprising:~~

a first board having a front surface and a back surface;

a thin film formed on the front surface of the first board for allowing a base sequence test sample to be stretched and immobilized on the thin film, said thin film having depressions and projections formed at a pitch in a range of from 0.1 μm to 10 μm ;

a heating means for heating and vaporizing the thin film in a desired region; and

a second board disposed opposite the thin film, whereby a region of the thin film is heated and vaporized to shoot a fragment of the base sequence test sample from the first board to the second board.

27. (Currently Amended) ~~The~~ An apparatus for analyzing a base sequence, ~~according to claim 15, wherein the heating means is an electric heater pre-formed in the first board,~~ comprising:

a first board having a front surface and a back surface;

an ablation layer formed on the front surface of the first board, said ablation layer being formed of a material capable of being vaporized by heating of the ablation layer;

a thin film formed adjacent the ablation layer for allowing a base sequence test sample to be stretched and immobilized on said thin film, said thin film having depressions and projections formed at a pitch in a range of from 0.1 μm to 10 μm ;

a heating means for heating and vaporizing the ablation layer in a desired region; and
a second board disposed opposite to the front surface of the first board, whereby a region
of the ablation layer is heated and vaporized to shoot a fragment of the base sequence test sample
with a corresponding fragment of thin film from the first board to the second board.

Kindly add new Claims 28-41 as follows:

28. (New) The apparatus for analyzing a base sequence, according to claim 26, wherein the material of the thin film is polymethyl methacrylate (PMMA).

29. (New) The apparatus for analyzing a base sequence, according to claim 27, wherein the material of the thin film is polymethyl methacrylate (PMMA).

30. (New) The apparatus for analyzing a base sequence, according to claim 15, wherein the heating means is an electric heater pre-formed in the first board.

31. (New) The apparatus for analyzing a base sequence, according to claim 26, wherein the heating means is an electric heater pre-formed in the first board.

32. (New) The apparatus for analyzing a base sequence, according to claim 27, wherein the heating means is an electric heater pre-formed in the first board.

33. (New) The apparatus for analyzing a base sequence, according to claim 15, wherein the heating means is a laser beam irradiating the back surface of the first board.

34. (New) The apparatus for analyzing a base sequence, according to claim 26, wherein the heating means is a laser beam irradiating the back surface of the first board.

35. (New) The apparatus for analyzing a base sequence, according to claim 27, wherein the heating means is a laser beam irradiating the back surface of the first board.

36. (New) The apparatus for analyzing a base sequence, according to claim 27, wherein the material contained in the ablation layer capable of being vaporized by heating, is plastic.

37. (New) The apparatus for analyzing a base sequence, according to claim 27, wherein the heating means is a laser beam irradiating the back surface of the first board, and in addition to the material capable of being vaporized by heating the ablation layer further contains a laser beam-absorbable material.

38. (New) The apparatus for analyzing a base sequence according to claim 37, wherein the beam-absorbable material is carbon.

39. (New) The apparatus for analyzing a base sequence, according to claim 24, wherein the beam-absorbable material is vapor-deposited between the material capable of being vaporized by heating and the first board.

40. (New) The apparatus for analyzing a base sequence, according to claim 37, wherein the beam-absorbable material is vapor-deposited between the material capable of being vaporized by heating and the first board.

41. (New) The apparatus for analyzing a base sequence, according to claim 38, wherein the beam-absorbable material is vapor-deposited between the material capable of being vaporized by heating and the first board.